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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,624	10/27/2005	Ryouichi Koga	P28729	7272
52123 7590 08/18/2011 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				
EXAMINER YOUNKINS, KAREN L				
ART UNIT		PAPER NUMBER		
3751				
NOTIFICATION DATE		DELIVERY MODE		
08/18/2011		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
pto@gbpatent.com

Office Action Summary

Application No.

10/554,624

Applicant(s)

KOGA ET AL.

Examiner

KAREN L. YOUNKINS

Art Unit

3751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 21-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is responsive to the amendment and request for continued examination dated 5/31/2011.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4-9 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Regarding Claim 4, the language relating to diameters renders the claim indefinite. The definition of diameter is the length of a straight line passing through the center of a circle and connecting two points on the circumference. The distance referred to by the applicant, from opening to orifice, is not a circle. Therefore this distance can not be a diameter. Claim 4 goes on to further define second and third inner diameters upon the definition of the first inner diameter. Thus, it is unclear what the second and third inner diameters are since the first inner 'diameter' is unclear. Claims 7-8 recite "said first space has an inner diameter" and "said third space has an inner diameter". The use of this language requires two distinct diameters, the ones claimed in claim 4 and the ones claimed in 7 and 8. However, the examiner believes the applicant intends to claim only one distance for each of the first, second, and third spaces. Clarification is requested.

5. Regarding Claim 20, Claim 20 currently requires a second front end. However, there is only one front end described in the specification. For the purposes of examination the examiner assumes the applicant intends to claim the front end of 20 as the same front end in claim 17 (from which claim 20 depends).

6. In light of the above, the claims are examined as best understood.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-20, as best as currently understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 3,182,860 to Gallo, SR (Gallo).

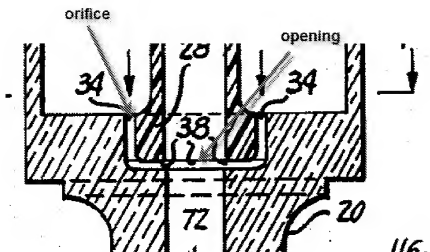
9. Regarding Claims 1 and 13, Gallo teaches a nozzle device comprising a spray hole 22, a pipe 30 forming a first flow path, a cover member (16/20) has the spray hole and surrounds the pipe and is formed on a longitudinally extending surface of the cover member (the cover member is three dimensional). The cover member is cylindrical about 30 and is integrally formed. A front end, shown where reference character 20 points in figure 2, is closed and prevents washing water from exiting through the front end. There is a space (shown at 36) between an outer surface of the pipe and an inner peripheral surface of the cover member. This space forms a second flow path that introduces water to the spray hole, such that the second flow path is configured to surround the outer surface of the pipe in a circumferential direction of the cover member

(see figure 2). It is noted that the cover member has infinitely many longitudinal axes, one of which the cover member extends traverse from.

Gallo differs in that it does not teach the cover being a stainless metal. Rather, Gallo does not disclose what material the cover is formed of.

Even though Gallo does not specifically disclose that cover comprises a stainless metal material as claimed, it would have been an obvious matter of design choice to one of ordinary skill in the art at the time the invention was made to have modified Gallo by employing the cover stainless metal material. Such modification would be considered a mere choice of a preferred material that is sturdy and resistant to corrosion available on the basis of its suitability for the intended use. In other words, the use of cover made of a metal material would have been an "obvious to try" approach because the use of such a known material for a cover of a nozzle is not of innovation but of ordinary skill and common sense. *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1742, 82, USPQ2d 1382, 1396 (2007).

10. Regarding Claim 2, a spray member (shown generally in the area around 34 and 28) has an orifice that is capable of merging washing water from the first and second flow paths as claimed.



11. Regarding Claim 3, the spray member has an 'internal space' with an opening at one end and an orifice at another end (see examiner annotated drawing above). The first flow path is capable of introducing water to the internal space via the opening, and the second flow path is capable of introducing water to the internal space from a peripheral surface of the spray member (see arrows in figure 2) as claimed. The 'internal space' is an open area in the device. Therefore, there are infinitely many cross sectional areas of all sizes within the internal space, the internal space has a cross-sectional area that gradually or continuously decreases from opening to orifice. Similarly regarding Claim 10, there are infinitely many cross sectional areas of all sizes within the first flow path and the opening of the internal space.
12. Regarding Claims 4-6 and 7-9, (from opening to orifice) the internal space includes a first space having a first inner 'diameter' from said opening to said orifice, a second space having a second inner 'diameter' smaller than said first inner 'diameter', and a third space having a third inner 'diameter' smaller than said second inner

'diameter'. It is noted that the term 'diameter' renders the claim indefinite as discussed above and are treated as distances. The 'internal space' is an open area in the device. There are infinitely many distances of all sizes within the spray space. Liquid introduced from the second flow path is supplied to the second space, and all other spaces, as it moves through the device. The second space may have a cylindrical space (figure 2 is a cross sectional view), and the liquid introduced from the second flow path is supplied along an inner peripheral surface of the cylindrical space, and all other spaces, see flow of liquid arrows in figure 2. An axis of the second flow path is directed inward from a peripheral wall of the cylindrical space. See drawing above.

13. Regarding Claim 11, the spray hole 22 is formed on the longitudinally extending surface in a vicinity of a front end of the cover member (see figure 2) and is 'inserted' into the front end of the cover member as the 28 and 22 are not formed of the same piece, 28 insertably operates within 22/16.

14. Regarding Claim 12, Gallo differs in that the cover member does not have a substantially hemispherical shape. However, it would have been obvious to one having ordinary skill in the art to have tried modifying the shape of the cover member to be substantially hemispherical in shape as a design choice. A change in form or shape is generally recognized as being within the level of ordinary skill in the art, absent any showing of unexpected results. *In re Dailey et al.*, 149 USPQ 47. A Change in aesthetic (ornamental) design generally will not support patentability. *In re Seid*, 73 USPQ 431. By extending the outer portion of the cover member to be substantially hemispherical, the nozzle is still capable of being used in its intended manner.

15. Regarding Claim 14, the language "wherein the cover member is formed by drawing forming" is a product by process limitation. The determination of patentability in a product-by-process claim is based on the product itself, even though the claim may be limited and defined by the process. That is, the product in such a claim is unpatentable if it is the same as or obvious from the product of the prior art, even if the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985). A product-by-process limitation adds no patentable distinction to the claim, and is unpatentable if the claimed product is the same as a product of the prior art. (Same cite as above)

16. Regarding Claim 15, the longitudinally extending surface (which is a 'peripheral wall') as shown in figure 2 is flat and in the vicinity of the front end as claimed. The spray hole is formed on this flat surface, see figure 2.

17. Regarding Claim 16, it is noted that the term 'diameter' renders the claim indefinite as discussed above and claimed diameters are treated as distances. The 'internal space' is an open area in the device. There are infinitely many distances of all sizes within the internal space, as well as within the orifice.

18. Regarding Claims 17-18, the connection between the protrusion at 28 (or 'second flat portion') and the corresponding side wall of 16 (around the opening at 34, or 'first flat portion') is a 'positioner' to the extent claimed, as the threads are capable of positioning a device. The orifice is 'positioned relative' to the spray hole as they are within the same device. The pipe is 'inserted' and positioned in such a way that the second flat portion and first flat portion are opposite. an See figure 2. Regarding Claim

20, the bottom of the protrusion at 28 be a front end abutment portion, as it abuts the structure/flow of material below.

19. Regarding Claim 19, the space between the spray member and the cover member is annular. The examiner takes official notice that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included an annular sealing member between the two to control the flow of water in a desired manner.

Response to Arguments

20. Applicant's arguments filed 5/31/2011 have been fully considered but they are not persuasive.

21. The examiner would like to thank the applicant for amending the specification as requested, the previous objection has been withdrawn.

22. Regarding the previous objection to the drawings, the "swirl" language of claim 6 has been cancelled and thus the previous objection has been withdrawn.

23. At page 21, the applicant has submitted that the 'diameters' extend in a direction generally perpendicular to a central longitudinal axis of the first, second, and third spaces. However, it is respectfully submitted that orientation has not been assigned to these spaces nor has a 'central longitudinal axis' been defined. The language is still unclear in light of the specification as originally filed, and the rejection under 112, second paragraph, of claims 4-9 for this language has been sustained. See discussion supra.

24. The examiner would like to thank the applicant for clarification of the positioner in claims 17 and 21 at page 21 of the arguments, however it is still unclear if the applicant intends to claim one end or two ends as set forth in the rejection above.

25. At pages, 22-23 the applicant has asserted that Gallo does not (and can not) prevent the contents of the dispensing device from exiting through 24. It is respectfully submitted that the examiner has not asserted this, and that Gallo fully meets the claimed language of claim 1. Water is prevented from exiting where reference character points to 20, as stated in the rejection above:

"A front end, shown where reference character 20 points in figure 2, is closed and prevents washing water from exiting through the front end. "

26. Further at page 23, the applicant has asserted that nozzle 22 of Gallo can not reasonably be considered a spray hole provided on a longitudinally extending surface of a cover member. However, the cover member is three dimensional, thus it extends longitudinally.

27. Also at page 23, the applicant has requested a rejoinder of claims 21-22. However, since claim 1 is not currently allowed, rejoinder at this time is improper.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAREN L. YOUNKINS whose telephone number is (571)270-7417. The examiner can normally be reached on Monday through Friday 7:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (571)272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. L. Y./
Examiner, Art Unit 3751

/Gregory L. Huson/
Supervisory Patent Examiner, Art Unit 3751